Reviewer’s report

Title: Chemical cystitis due to crystal violet: A case report

Version: 2 Date: 6 March 2013

Reviewer: Tatsuo Gondo

Which of the following best describes what type of case report this is?: An unexpected association between diseases or symptoms

Has the case been reported coherently?: Yes

Is the case report authentic?: Yes

Is the case report ethical?: Yes

Is there any missing information that you think must be added before publication?: Yes

Is this case worth reporting?: Yes

Is the case report persuasive?: Yes

Does the case report have explanatory value?: No

Does the case report have diagnostic value?: Yes

Will the case report make a difference to clinical practice?: Yes

Is the anonymity of the patient protected?: Yes

Comments to authors:

The authors reported a rare case of chemical-induced cystitis due to intravesical instillation of crystal violet and mentioned that magnetic resonance imaging (MRI) is a useful for assessing the extent of damage caused by this chemical agent. They also suggested that nonsteroidal antiinflammatory drugs (NSAIDs) and glucocorticoids would be useful for treating chemical-induced cystitis.

Comments and requests:

Crystal violet is also well known as pyoctanin and is a very popular agent used for surgical marking in operative fields. Therefore, it could happen that crystal violet is accidentally injected into the bladder for detecting vesicovaginal fistulas in clinical practice, and this case could caution against the danger of using crystal violet, he reviewer has some concerns that should be addressed to improve the quality of this manuscript.
1) In the Introduction section, the author mentioned that crystal violet has been replaced with indigo carmine in the treatment of oral and vaginal candidiasis or for sterilization. Is this correct?

2) The author mentioned that crystal violet is a multinominal reagent, which is a mixed ratio of gentian violet, methyl violet, and Bonney’s blue. However, as Bonney’s blue dye is a 1:1 mixture of brilliant green and crystal violet dissolved in ethanol, the reviewer thinks that it is a different solution from crystal violet itself.

3) Avoid overstating the impact of this case report (i.e., any patient with chemical-induced cystitis “should be evaluated” for the level of damage in the bladder wall by MRI) because the present study did not provide any evidence that MRI should be performed in patients with chemical cystitis. Can authors explain how MRI results can change the treatment strategy for such patients?

4) Crystal violet has been suggested to be a carcinogen in experiments in rodents, and the FDA has also suggested a relationship between crystal violet and bladder cancer. With respect to this information, how do the authors think that this patient should be followed up after the chemical-induced cystitis is healed?

**Quality of written English:** Needs some language corrections before being published

**Declaration of competing interests:**

I declare that I have no competing interests